

3625, Huntington Co Com Schools

PROJECT ABSTRACT

The purpose of this grant is to support the progress of both Warsaw Community Schools and Huntington County Community School Corporation's efforts to establish a project based high school learning environment that will focus on the STEM objectives and goals as specified on the I-STEM (Indiana Science, Technology, Engineering, Language Arts and Math Resource Network website). <http://www.istemnetwork.org/about/objectives.cfm>

In many cases, our schools instructional practices are teacher-centered. The teacher dispenses information in the form of lecture and is the key decision maker regarding curriculum content and outcomes. The classroom is traditional in that the emphasis is placed on content and delivery rather than context. Our plan recognizes the need to change from our current teacher-centered instructional practices to a more student-centered environment. Both school district's plan is to move the role of the teacher to more of the instructional facilitator that focuses on engagement and authentic project-based instruction.

Our focus, is to improve our scores in English/Language Arts - specifically reading and writing integrated into a STEM focused environment. The districts are also beginning to focus efforts on the STEM (science, technology, engineering, & math) areas to support student achievement and career readiness.

Huntington County Community Schools has approved the New Tech Model which is focused on providing an increased academic rigorous environment. Warsaw Community Schools is only beginning to evaluate this model.

Implementing the New Tech Model which creates a rigorous learning environment.

WCS will evaluate the New Tech model.

Increasing math and reading scores by 3%. (Passing ECA and ISTEP)

Increase students enrollment in AP and dual credit by 5%

WCS will increase the Project Lead the Way program to include 20% of our science students.

These goals align back to HCCSC's Strategic Plan and WCS's district PL221 plan.

NEEDS/BASELINE

This grant will address the needs at Huntington North High School (HNHS). Huntington North is the only high school in the Huntington County Community School Corporation. Huntington North serves 1,848 students in grades nine through twelve in a rural setting. HNHS serves an SES population of approximately 28.8%; compared to a district average of approximately 38.9%. Our focus, both as a district and at HNHS, is to improve our scores in English/Language Arts – specifically reading and writing as it ties into this learning technology grant. The district and HNHS are also beginning to focus efforts on the STEM (science, technology, engineering, & math) areas to support student achievement and career readiness.

Like Huntington County Community Schools, this grant will address the needs of Warsaw Community High School (WCHS). WCHS serves 1,972 students in grades nine through twelve in a rural setting. The SES population is 35%. Warsaw would like to increase student achievement. Our scores and trends are strikingly similar to Huntington's. Our PL 221 results are down 2.3%. We would like to reverse this trend. We also plan to focus efforts on STEM areas.

ISTEP+/GQE % Passing English/Language Arts

	Fall 2008			Fall 2007		
	Gen. Ed.	Spec. Ed.	SES	Gen. Ed.	Spec. Ed.	SES
Grade 9	--	--	--	77%	16%	54%
Grade 10	80%	19%	55%	79%	13%	54%

ISTEP+/GQE % Passing Math

	Fall 2008			Fall 2007		
	Gen. Ed.	Spec. Ed.	SES	Gen. Ed.	Spec. Ed.	SES
Grade 9	--	--	--	85%	29%	66%
Grade 10	78%	21%	60%	78%	3%	52%

Core 40/End of Course Assessments

	Spring 2009	Spring 2008	Spring 2007
English 11	40%	36%	41%
Algebra I	11%	19%	19%

NWEA Spring 2009: Grades 9-12, % at or above proficiency

Reading 79.2%

Math 79.4%

GOALS/OBJECTIVES

Our NCA/PL 221 School Improvement Plan recognizes the skill level deficits at the high school and has identified the areas of reading and writing as the primary focus for improved student achievement. However, HCCSC and WCS are both exploring alternative models to better meet the needs of students in other areas. Technology integration will play a role in that reform.

Using the New Tech model, HCCSC plans to improve student learning by creating a rigorous learning environment and incorporating the key elements of the New Tech Model.

1. A project-based instructional approach that is student-centered and engages learners.
2. A culture that empowers students and teachers. Trust, respect, and responsibility are the hallmarks of our culture. At New Tech schools, students and teachers alike have exceptional ownership of school administration and the learning experience.
3. Integrated use of technology.

The primary goal of both HCCSC and WCS is to learn and adapt the New Tech Model's philosophy and start to replicate the advantages this model creates across both school districts.

<http://www.newtechfoundation.org/index.html>

Curriculum alignment based on Indiana Academic Standards is achieved in the district through curriculum mapping utilizing Rubicon Atlas mapping software. The district will continue to curriculum map and survey teachers regarding the actual use of technology in classrooms. The principal also meets on a regular basis with Department Chairs to discuss achievement data and strategy implementation.

METHODS/ACTIVITIES

Complete descriptions of how the activities tie into the projects' educational goals are:

The project will integrate technology into classroom instruction:

- Utilize the technology integration resources (Technology Integration Specialist and PD coaches) that HCCSC employs to monitor and follow-up with technology integration efforts.

- Add another Technology Integration Specialist (TIS)

- Implement project-based instruction through the New Tech High School Model utilizing one-to-one computer access.

- Ensure that all students and teachers are served by providing assistance with technology instruction, support, and collaboration time with fellow teachers and the Technology Integration Specialist.

Implement innovative strategies including, but not limited to, Project-based instruction, Moodle, WebQuest, Video Conferencing, and Virtual Field Trips.

- Align Indiana State Standards in the areas of English/Language Arts and STEM to Technology standards.

The project will build our capacity for one-to-one computing and integrate technology by providing technological literacy training for teachers along with collaboration time within HNHS to focus on the vision, goals, and strategies delineated by the New Tech High School Model, the Professional Learning Communities work, Susan Kovalik's Highly Effective Teaching Model, and Dr. Bill Daggett's Rigor, Relevance, & Relationship Model. Collaboration and professional development time will pair teachers with the Technology Integration Specialist(s) and outside coaches to support the curriculum through lesson development.

We will integrate technology into classrooms using research-based strategies from the New Tech High School Model; the Highly Effective Teaching Model; The Rigor, Relevance, and Relationship Model, and

Professional Learning Communities Model. The various strategies for achieving these project goals will include brain-based curriculum and instruction, project-based instruction, multiple intelligences theories, learning styles, and Bloom's Taxonomy. All strategies focus on integrating core content areas and technology effectively in the classroom to provide real-world application for students.

The New Tech Foundation has a complete professional development process that outlines in detail the steps needed to implement successfully. HCCSC and WCS will model add to that process to meet the needs of our both our school districts.

Warsaw will integrate technology into classroom instruction in a similar fashion as Huntington. However, we are at an earlier stage in this process and need to first focus on building our infrastructure and professional development activities for staff. Thus, we will not initially have a true one-to-one computing environment. HCCSC and WCS will work together to adapt the models to our environments.

PROFESSIONAL DEVELOPMENT

The HCCSC technology professional development model brings the training to the teacher as often as possible using the teacher's instructional content. This is accomplished by having a Technology Integration Specialist on staff to support technology integration efforts that align with instructional standards as well as bringing in other outside professionals. The training takes several forms from team teaching in the classroom to small groups to one-to-one instruction. HCCSC strongly believes that adding additional Technology Integration Specialists enable and support teacher's growth in both technology integration as well as other proficiencies recommended by the Education Technology Council's Indiana Digital-Age Learning Plan.

HCCSC plans to add another Technology Integration Specialist to support teachers integration of new skills.

WCS plans to create a Technology Facilitator position to support their integration needs.

The New Tech Foundation has a complete professional development process that outlines in detail the steps needed to implement successfully. HCCSC and WCS will model add to that process to meet the needs of our both our school districts.

HCCSC has a complete professional development and technology plan that is aligned to meeting the needs of teachers.

HCCSC Professional Development Calendar:

<http://www.hccsc.k12.in.us/corppages/0910.pd.calendar.pdf>

HCCSC Technology Plan: http://www.hccsc.k12.in.us/Technology/tech.plan.10_12.pdf

HCCSC has demonstrated this belief by creating and sustaining the Technology Integration Specialist position for over five years. This model of professional development fully supports the New Tech High School as well as other digital literacy training needs.

Warsaw staff will follow the Professional Development Strategy outlined in the Warsaw Community Schools Technology Plan.

Activities include:

• Technology facilitator and/or math coach and teachers will meet to articulate resource needs, training needs and expertise needed to implement the initiative. The outcome will be a year-long plan based on individual needs and specific student goals with each staff member.

• Math and Science teachers, media specialist and technology staff will complete a STEM self-assessment.

• Math and Science teachers, media specialist will complete a technology self-assessment.

• A technology facilitator and/or math coach will meet with math and science area teachers and technology staff to review STEM and technology self-assessments; evaluate the STEM standards; create professional development goals and activities like attending STEM training/conferences, Moodle training, software training, and wireless network training. Each teacher will have a year-long plan based on individual needs and specific student goals.

FORMATIVE/SUMMATIVE EVALUATION

HNHS will implement a clear evaluation plan to assess the impact of the project on student, faculty, and administrators using NWEA Reading and Math, Core 40/End of Course Assessments, Quarterly common authentic and appropriate assessments that are put in place by the staff with curriculum consultant facilitating and providing support for staff, and stakeholder satisfaction surveys. The benchmark and common assessments will provide specific and detailed reporting to allow evaluation of success.

Warsaw, per the professional development strategies outlined above, will utilize a technology facilitator and math coach. They will meet with math and science area teachers to review STEM and technology needs to create goals, activities and assessments to meet and evaluate the STEM standards. Learning plans are developed for the STEM subjects of math and science. Self assessments are taken and evaluated.

Warsaw will also review the NWEA Math, Core 40/End of Course Assessments, Quarterly assessments and surveys to assess the program.

LOCAL MATCH

\$50,000

HCCSC has and will continue to work towards a one-to-one, project-based, STEM and literacy focused, technology integrated learning environment with the use of available funding. This is not a new direction that needs to change for Huntington Schools. The additional funds will be used to enable HCCSC to move forward with our goals sooner and effect more students quicker than we would be able to without the funding. HCCSC is ready for these funds to impact student learning faster than other districts that are just starting to explore this model of instruction and support.

Warsaw Community Schools continues to support learning initiatives with technology components like Project Lead the Way and STEM through our technology lines in our CPF budget. All classrooms at WCHS will be equipped with projectors and Mimio devices by Jan 2010 to support continued integration of technology into the classroom.

The Warsaw community is fortunate that we have several multi-national corporations in the Biomedical Sciences and Engineering fields. We would like to attract more students to these fields. We are pursuing opportunities to promote technology integration with the Orthworx group that will distribute grant funding provided by the Eli Lilly Foundation.

PARTNERSHIPS

Huntington County Community Schools will partner with Warsaw Community Schools to increase student academic achievement through the use of Warsaw's technical expertise in the areas of server virtualization and storage area network technology. These technologies will assist in creating a more consistent, effective and service rich computing environment that supports student achievement.

Huntington Schools has technical infrastructure expertise and will assist Warsaw Schools in this area.

Grace College in Warsaw, IN has also agreed to partner with us. We will conduct collaboration sessions in the areas of wireless and Moodle. Grace and Huntington have mature wireless infrastructures in place to assist Warsaw. However, Grace is just deploying Moodle in January 2010. Warsaw and Huntington have both had Moodle in place for 3 years and can provide expertise and support in the area. These institutions will share training sessions in Moodle with vendors to lower costs.

Workshops, Webinars between the different schools